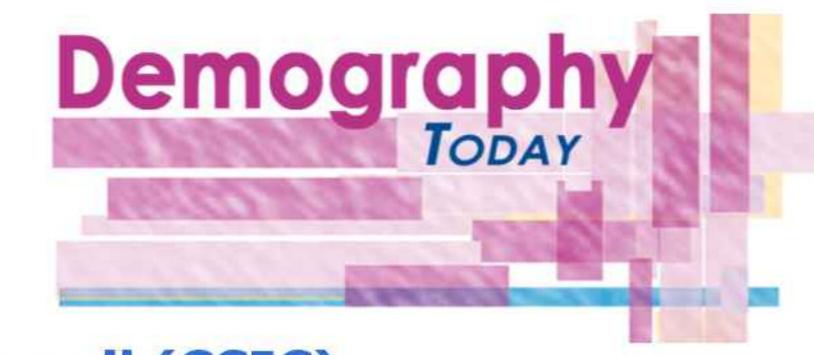
## Fundación BBVA



The BBVA Foundation and the Spanish National Research Council (CSIC) are pleased to invite you to the lecture:

# Cities at High Resolution: Using Big Data to Understand Social Segregation

Esteban Moro

Associate Professor at Universidad Carlos III de Madrid, Spain, and Visiting Professor at MIT, USA

### Summary:

Segregation is one of the most important population processes in cities: in the USA one in five city dwellers lives in a very income-segregated community. Social or income segregation is a spatial process and most work has focused mainly on residential segregation, i.e., on the basis of places of residence. But due to the increased mobility of people today, segregation is a process than goes beyond home or work places. Furthermore, as Ray Oldenburg argued, third places (not home or work) where people mix are important for civil society, democracy and civic engagement. But are there still enough third places in our cities to fulfil this function? To answer that question we studied a unique database of three billion location events of 329,000 users in the Boston metropolitan area. Using these data we identified 10,000 places where people of different economic backgrounds mixed, and analyzed their characteristics. We found that most third places were related to shopping and leisure activities, and that patterns of mixing depended on the place's actual character. Finally we constructed the mobility network of people between those places to analyze how important third places are for the problem of mobility network resilience. In this talk, we will discuss the implications of our results in the contexts of the future development of areas and the ever-changing evolution of our cities.

### Biography:

Esteban Moro is Associate Professor at Universidad Carlos III de Madrid (Spain), a member of the Joint Institute UC3M-Santander on Big Data and Academic Director of the MS in Data Science and Financial Big Data at AFI (Spain). He is also a Visiting Professor at MIT Media Lab (USA). He has served as a consultant for many public and private institutions and has held positions at the University of Oxford, the Institute of Knowledge Engineering (Spain) and the Instituto Mixto de Ciencias Matemáticas (Spain). After earning a BSc in Physics from the University of Salamanca, he went on to complete a PhD in the same subject at Universidad Carlos III de Madrid. Author of more than 50 published articles, he has led and participated in over 20 projects funded by government agencies and/or private companies. His areas of interests are applied mathematics, financial mathematics, viral marketing and social networks. He received an IBM Shared University Award in 2007 for modelling the spread of information in social networks and its application to viral marketing, and a Research Excellence Award in 2013 and 2015 from Universidad Carlos III de Madrid. His team's recent work has been covered by many media outlets, with articles and interviews in publications like *El Pais, Muy Interesante, The Atlantic, The Washington Post,* and *The Wall Street Journal.* 

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This lecture series enjoys the exclusive support of the BBVA Foundation and has been co-organized with the Spanish National Research Council and the LONGPOP project (Methodologies and Data Mining Techniques for the Analysis of Big Data based on Longitudinal Population and Epidemiological Registers). The LONGPOP project has received funding from the European Union's Horizon 2020 research and innovation program under a Marie Sklodowska-Curie grant.

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The lecture series also forms part of the Postgraduate Courses run by the Spanish National Research Council (CSIC).

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Monday, April 9 at 19:00 Fundación BBVA

Paseo de Recoletos, 10 28001-Madrid

REQUEST ATTENDANCE

Please confirm attendance. Limited seating e-mail: confirmaciones@fbbva.es

The lecture will be delivered in English without translation